

Bunker Hill

DATE: 06/13/2000

AMD Mitigation Concepts

PROJECT NO.: 152215.FS.02

4.3: Improve Existing Diversions (Improve Seal, Decrease Weir Overflow)

Order of Magnitude Cost Opinion

ESTIMATE BY: D. Hedglin

DESCRIPTION	QTY	UNIT	TOTAL UNIT COST	TOTAL COST	COMMENTS
Modifications to Existing Diversion Structure					
Diversion/Care of Water	1	LS	20,000.00	\$20,000	
Excavate for New Structure	150	CY	17.23	\$2,585	
Native Backfill Around Structure	60	CY	13.30	\$798	
Raise Existing Spillway on Dam	1	LS	23,299.89	\$23,300	allowance
Excavate for Screen Structure	70	CY	17.23	\$1,206	
Native Backfill Around Screen Structure	20	CY	13.30	\$266	
Backfill Riprap Overflow Spillway	325	CY	39.95	\$12,984	
Construct Screen Intake Structure	45	CY	552.24	\$24,851	
Construct Transition Structure	30	CY	552.24	\$16,567	
Bar Screen	1	LS	22,659.98	\$22,660	
Foundation Grout Curtain	1,500	LF	40.00	\$60,000	
Excavation	833	CY	17.23	\$14,358	
Gravel pad for concrete pad	50	CY	20.00	\$1,000	
Concrete base pad, 8+ thick	70	CY	300.00	\$21,000	
Riprap Cover	625	CY	28.62	\$17,884	
SUBTOTAL				\$239,459	
MISC ALLOWANCE	10%			\$23,946	
SUBTOTAL				\$263,405	
CONTINGENCY	50%			\$131,703	
SUBTOTAL				\$395,108	
MOBILIZATION	15%			\$59,266	
CONSTRUCTION TOTAL				\$454,374	
SALES TAX ON MATERIALS	5.0%			\$5,113	
ENGINEERING AND SUPPORT	20%			\$90,875	
CONST MANAGEMENT	8%			\$36,350	
CAPITAL TOTAL (ROUNDED)				\$590,000	
ANNUAL O&M COST			\$99,300		
NPV OF ANNUAL O&M COSTS (30 YEARS @ 7% INTEREST)				\$1,232,000	
TOTAL 30-YEAR PRESENT WORTH COST @ 7% INTEREST				\$1,822,000	

NOTES:

Misc Allowance markup is to include items known to exist but cannot be quantified at this time.

Contingency is for scope changes that are presently unforeseen.

Mobilization includes bonds, insurance, temporary facilities, health & safety, demobilization, etc.